

FACT SHEET

North Dakota Ethanol Council

1. Establishment

The North Dakota Ethanol Council was established in 2009 by the North Dakota State Legislature to promote the state's ethanol industry.

2. Funding

The North Dakota Ethanol Council is funded by the first ethanol check-off program in the nation. Each ethanol plant pays a three one-hundredths of one cent assessment (check-off) per gallon of ethanol produced and sold in North Dakota.

3. Priorities

The priorities for the North Dakota Ethanol Council include industry research and promotion, education programs, and market development.

4. Members

Representatives from the five North Dakota ethanol plants that produce more than one million gallons of ethanol annually make up the North Dakota Ethanol Council.

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5. Staff

The North Dakota Ethanol Council is staffed by Executive Director Deana Wiese of Clearwater Communications.

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FACT SHEET

North Dakota Ethanol Industry

1. Economic Impact

The North Dakota ethanol industry contributes \$623 million annually to the state's economy. In addition, state and local tax revenues contribute more than \$11 million annually.

2. Employment

North Dakota ethanol plants employ more than 230 workers directly in high-paying positions such as chemists, engineers, accountants, managers, as well as support staff. The industry also supports more than 1,000 jobs across all sectors of the economy.

3. Rural Economic Development

Each North Dakota ethanol plant is located in a community with a population of less than 2,500 and contributes an average of 46 jobs and an average annual payroll of \$3.3 million to the community. In addition, the plants purchase the majority of their corn from North Dakota farmers and sell distillers grains to North Dakota livestock producers.

4. Production

The five North Dakota ethanol plants have the capacity to produce 520 million gallons of ethanol per year, which is more than five times the production a decade ago.

5. Consumption

Over the past five years total ethanol-blended fuel sales have increased by more than 16 percent. Approximately 10 percent of ethanol produced annually in North Dakota is blended with gasoline and sold within the state, while the remaining 90 percent is shipped primarily to the east or west coast.

6. Corn Use

North Dakota ethanol plants use 160-180 million bushels of corn annually with more than 80 percent of the corn purchased from North Dakota farmers. Forty to 60 percent of North Dakota's total corn production annually is purchased by North Dakota ethanol plants.

7. Co-products

Each bushel of corn processed by North Dakota ethanol plants produces 2.8 gallons of ethanol, 18 pounds of livestock feed (dried distillers grains), 18 pounds of carbon dioxide and up to 1 pound of corn oil. North Dakota ethanol plants produce more than 1.5 million tons of dry distillers grains annually.

8. Infrastructure

North Dakota is a national leader in the establishment of biofuel infrastructure due to the ND Biofuel Blender Pump Program (2009-2013). The state was the ninth to offer E15. The number of flex fuel vehicles (FFV) in the state has increased by 250 percent from 34,630 in 2011 to 121,500 in 2015.

FACT SHEET

National Ethanol Industry

1. Economic Impact

The United States ethanol industry added \$45 billion to the Gross Domestic Product in 2017. It also contributed \$10 billion in additional tax revenue for federal, state and local governments and added \$24 billion in household income.

2. Employment

The nation's ethanol industry supports more than 357,000 jobs in all sectors of the economy.

3. Rural Economic Development

Each plant contributes to the local economy by providing jobs at above average wages and an additional market for locally grown corn.

4. Production

In 2017, a record 15.8 billion gallons of ethanol was produced at 211 plants in 28 states. This is up from the previous record of 15.25 in 2016.

5. Consumption

Ethanol is blended with approximately 97 percent of the nation's gasoline supply. The ethanol used in 2017 accounts for about 10 percent of the nation's motor fuel supply, up from less than 1 percent 20 years ago. In addition, a record of 1.3 billion gallons was exported to nearly 50 countries in 2017. Brazil (33 percent), Canada (26 percent) and India (13 percent) make up 72 percent of all shipments.

6. Corn Use

The nation's ethanol industry used 5.5 billion bushels of corn produced in the United States in 2017 for ethanol and co-product production, which includes 41.4 million metric tons of high-quality livestock feed. When this is factored back into the corn supply, the true measure of ethanol's corn use is 29 percent of the total supply.

7. Renewable Fuels Standard

The Renewable Fuels Standard requires 36 billion gallons of renewable fuels to be used annually by 2022. This includes 15 billion gallons of corn-based ethanol and 21 billion gallons of additional fuels created from biomass and cellulosic feedstock.

8. Reduced Gas Prices

Growth in ethanol production has lowered the price of gasoline by \$0.18 per gallon on average since 2015.

9. Environmental Benefits

Ethanol use reduces greenhouse gas emissions by 43 percent.

10. Energy Security

The 15.8 billion gallons of ethanol used in the United States in 2017 displaced 560 million barrels of imported oil, which is the equivalent of the oil imported annually from Saudi Arabia and Kuwait combined. In addition, use of domestic ethanol in 2017 decreased dependence on foreign oil by five percent since 2016 – from 25 to 20 percent.

11. Co-Products

In 2017, the nation's ethanol industry produced 41.4 million metric tons (mmt) of distillers grains, gluten feed and gluten meal. This would be enough feed to produce nearly 50 billion quarter-pound hamburger patties – or seven patties for every person on the planet. Approximately 11 mmt were exported in 2017 with Mexico (20 percent) being the top export market. The industry also produced 3.6 billion pounds of corn distillers oil, used as a feed ingredient or biodiesel feed stock.

12. Increased Efficiency

Natural gas and electricity use at ethanol plants has decreased nearly 40 percent since 1995, while consumptive water use has been cut in half. This is while ethanol yields increased by more than 15 percent. In addition, one unit of energy invested in making ethanol yields up to 2.3 units of energy available to the consumer.

13. Infrastructure

The number of gas stations offering flex fuels (E20-E85) hit over 4,000 stations in 2017. The USDA's Biofuels Infrastructure Partnership program and ethanol industry initiatives, such as Prime the Pump, made E15 available at more than 1,200 stations in 29 states. The number of U.S. retail stations offering E15 doubled from 2016 to 2017.